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ABSTRACT

This theoretical paper deals with a comparison of the structure and content of primary and secondary thought processes. While secondary processes (cognitive thinking) are effectively dealt with and taught in schools, there is little or no relating to the primary processes (affective thinking). This is due in part to teachers' own difficulties in handling the cognitive domain in their interactions. Primary and secondary processes are seen to have seven structural aspects: (1) Weight - secondary process thought is light while primary process thought is heavy; (2) Pathways - unlike secondary processes, primary processes are neither logical, clear, nor obviously related; (3) Time and Space - primary processes have little regard for the laws of nature while secondary processes are bound largely by them; (4) Operational Dialect - relationships that are acceptable to primary process thinking are impossible in secondary process thinking; (5) Sources of Energy - whereas primary process requires inputs and outlets to keep inner tensions in balance, secondary process seeks linkages; (6) Morality - the 'rightness' of emotional thinking is guided by the pleasure-pain principle as contrasted to the reality principle in intellectual thinking; and (7) Historical Antecedents - primary processes are part of the oldest neurological structures, whereas secondary processes obtain data from the sense organs. This metaphorical discussion should help teachers and parents to understand behavior which exceeds rational understanding. (Author/NG)

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Cognitive Concepts of Emotional Education

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Two of the unique qualities of our species are our ability to think and our ability to think about our thinking. The first quality is usually conceptualized in some cognitive or Piagetian model. The second quality is inferred in an ego structure which enables us to respond to ourselves and our sensible, insensible and nonsensical behaviors. Most formal educational institutions are concerned with improving the quality and effectiveness of our thinking through cognitive means. Only rarely does one encounter formal or informal educational processes aimed at improving our thinking about thinking.

Cognitive development is manageable, measurable and can be corralled into disciplines or fields of study. Emotional development lacks structure, specificity and a conceptual basis for measurement except when one becomes mentally ill or disordered. In effect we have had to minimize emotional thinking as a legitimate thought process for development in educational institutions primarily because it appears to be cognitively unmanageable. Consequently we have been inordinately unsuccessful in spelling out the idea of ego structure as the administrator of cognitive and emotional thinking processes and most importantly as the integrator of these two processes in the growth and development of effective adults.

Undoubtedly when learning is seen as keeping one's nose

TO THE GRINDSTONE, IT IS FAR BETTER TO BE HARD NOSED. BEING HARD NOSED, ONE DEFINES AN AREA OF STUDY AND KNOWLEDGE AND APPLIES ONE'S COGNITIVE SKILLS AND ABILITIES TO ITS MASTERY. SUCH AN ORIENTATION IS TOUGH, COMPREHENSIVE AND PRODUCT ORIENTED. MOREOVER, THE END RESULT OF SUCH HARD-NOSED ACTIVITY IS MEASUREABLE IN EDUCATIONAL AND IN HARD-NOSED ECONOMIC TERMS.

IT IS ON BEHALF OF MYSELF AND SOME OF MY SOFT-NOSED COLLEAGUES THAT I WOULD LIKE TO SUGGEST SOME POSSIBILITIES FOR THINKING ABOUT EMOTIONAL THINKING IN THE EDUCATION OF CHILDREN.

MY TEXT IN THIS MINOR SERMON IS TAKEN FROM (WHO ELSE?) FREUD AND HIS 1911 ESSAY ON MENTAL MECHANISMS. IT GOES THIS WAY, "EDUCATION CAN, WITHOUT FURTHER HESITATION, BE DESCRIBED AS AN INCITEMENT TO THE CONQUEST OF THE PLEASURE PRINCIPLE AND TO ITS REPLACEMENT BY THE REALITY PRINCIPLE . . .. ACTUALLY THE SUBSTITUTION OF THE REALITY PRINCIPLE FOR THE PLEASURE PRINCIPLE DENOTES NO DETHRONEMENT OF THE PLEASURE PRINCIPLE BUT ONLY A SAFEGUARDING OF IT." (4)

OR LET ME GET AT THE SAME THOUGHT BY A CONTEMPORARY OF FREUD WORKING IN ANOTHER FIELD. "IMPULSE IS PRIMARY AND INTELLIGENCE IS SECONDARY AND IN SOME SENSE DERIVATIVE. THERE SHOULD BE NO BLINKING OF THIS FACT. BUT RECOGNITION OF IT AS A FACT EXALTS INTELLIGENCE. FOR THOUGHT IS NOT THE SLAVE OF IMPULSE TO DO ITS BIDDING . . .. WHAT INTELLIGENCE HAS TO DO IN THE SERVICE OF IMPULSE IS TO ACT NOT AS ITS OBEDIENT SERVANT, BUT AS ITS CLARIFIER AND LIBERATOR . . .. INTELLIGENCE CONVERTS DESIRE INTO PLANS." (2)

THESE TWO GENTLEMEN ARE SEPARATING AND RELATING TWO DISTINCT STRUCTURAL COMPONENTS OF THINKING. LET US DESIGNATE EMOTIONAL, IMPULSIVE, PLEASURE-PRINCIPLED THINKING AS PRIMARY PROCESS AND RATIONAL, REALITY-GUIDED THINKING AS SECONDARY PROCESS. PRIMARY PROCESS IS PHYLOGENETICALLY EARLIER AND PERHAPS MORE PUZZLING SINCE "KNOWING" IT COMES THROUGH SECONDARY PROCESS. YET BOTH PROCESSES ARE SELF-SUFFICIENT IN THEIR TRANSFORMATIONS, ARE SELF-REGULATING AND OPERATE ON THEIR OWN UNIQUE KIND OF INNER SENSE. WHEREAS I WILL BE PRESENTING THE UNIQUE TRANFORMATIONAL AND SELF-REGULATORY PROPERTIES OF EMOTIONAL AND RATIONAL THINKING AS SEPARATE STRUCTURES, OTHER TRANSFORMATIONAL AND SELF-REGULATORY PROPERTIES APPLY TO THEIR ORGANISMIC INTERACTION.

THE FIRST STEP IN BRINGING PRIMARY PROCESS INTO THE SCHOOL ARENA AS A TANGIBLE AND LEGITIMATE CONCEPT IS TO DEFINE ITS STRUCTURE IN MUCH THE SAME MANNER AS MANY HAVE ATTEMPTED TO DO WITH SECONDARY PROCESS. INHERENT IN THE STANFORD-BINET, WECHSLER OR TESTS OF PRIMARY MENTAL ABILITIES ARE SPECIFIC STRUCTURES THE MASTERY OF WHICH RESULTS IN GOOD SECONDARY PROCESSING. FOR THE PMA THESE WOULD BE VERBAL COMPREHENSION, WORD FLUENCY, NUMBER ABILITY, SPATIAL VISUALIZATION, ASSOCIATIVE MEMORY, PERCEPTUAL SPEED AND REASONING. GUILFORD STRUCTURED THE INTELLECT INTO A CUBE WITH OPERATION FACTORS (COGNITION, MEMORY, DIVERGENT THINKING) ON ONE SIDE; PRODUCT FACTORS (INVOLVING UNITS, CLASSES, RELATIONS, SYSTEMS) ON ANOTHER; AND CONTENT FACTORS (FIGURAL, SYMBOLIC, SEMANTIC OR BEHAVIORAL) ON THE THIRD SIDE, ALL INTERACTING INTO A MULTIPLICITY OF

COMBINATIONS. (8) THE ILLINOIS TEST OF PSYCHOLINGUISTIC ABILITIES ATTEMPTS TO MEASURE 12 STRUCTURES SUCH AS AUDITORY RECEPTION, VISUAL RECEPTION, VISUAL CLOSURE, VISUAL SEQUENTIAL MEMORY, AUDITORY SEQUENTIAL MEMORY, ETC.

WHAT I HAVE ATTEMPTED TO DO FOR PRIMARY PROCESS IN THE FOLLOWING SECTION FALLS FAR SHORT OF THESE EXAMPLES IN SECONDARY PROCESS. I HAVE SELECTED SEVERAL STRUCTURES WHICH I FEEL CAN BE HELPFUL TO THE NON-SOPHISTICATED TEACHER AND PARENT IN UNDERSTANDING THE DIFFERENCES AND INTEGRATIVE RELATIONSHIPS BETWEEN EMOTIONAL AND INTELLECTUAL THINKING. SINCE THESE DIFFERENCES ARE PRESENTED IN SECONDARY PROCESS TERMS, I AND SOME COLLEAGUES HAVE ATTEMPTED TO COMMUNICATE THE SAME CONCEPTUAL NOTIONS VISUALLY FROM A PRIMARY PROCESS VIEWPOINT.

FOR EXAMPLE, THE FIRST STRUCTURE ATTEMPTS TO COMPARE AND INTEGRATE THE "HEAVINESS" OF PRIMARY PROCESSES WITH THE TWINKLETOES NIMBLENESS OF SECONDARY PROCESS. WE TRIED TO CONSTRUCT "HEAVINESS" AS A FEELING CONCEPT. HERE (SLIDE 1) WE HAVE OUR NOTION OF HEAVINESS AND ITS STRUCTURAL PARTNER, THE LIGHT-FOOTED DANCER. THE MORE POWERFUL PRIMARY PROCESS WILL COVER THE CANVAS IN COLOR, BEING MORE ENERGIZED AND PERSUASIVE. SECONDARY PROCESS WILL, IN COMPARISON, BE SOMEWHAT PALE, TRANSPARENT AND REEDY.

IN DEVELOPING THESE CONCEPTS I HAVE, OF COURSE, BORROWED FREELY FROM FREUD, JUNG, RAPOPORT, HARTMANN, FLIESS, LOWENSTEIN AND OTHERS. IN THIS COMPARATIVE, INTEGRATIVE TASK, I HAVE CHOSEN SEVEN DISTINCTIVE BUT OVERLAPPING STRUCTURES. THESE ARE 1) WEIGHT, 2) PATHWAYS, 3) TIME AND SPACE, 4) OPERATIONAL DIALECTIC, 5) SOURCES OF ENERGY, 6) MORALITY, 7) HISTORICAL ANTECEDENTS.

Primary and Secondary Process Structures Contrasted

1) Weight

An emotionally disturbed boy confided to me, "My problem is I'm always sad and blue. Even when they told me I could go home, I couldn't shake it. I'm blue when I go to bed and I'm blue when I get up." This was an otherwise healthy, handsome lad of good intelligence with an unfortunate early life. His perception of himself and his world were weighted by heavy, ponderous and relatively immovable symbols. No amount of reason, reassurance and retrospection could shake his mood. For comparison take the average person who watches the 11:00 o'clock news, is somewhat depressed by bedtime but wakes up optimistic and ready for a new day. However obtained, primary process thoughts have a momentum like a heavily weighted freight train without brakes moving down an incline. It is difficult to slow, stop or reroute.

On the other hand, secondary process thought is light, airy, and fantastically nimble. Koestler points out the meaning and relationship of this dimension in the characteristically human, healthy response of laughter.(7)A good story teller can move your emotion-intellect down a track. . . then surprisingly and suddenly switch direction via secondary process thought (the punch line). Primary process, massive and lumpy, moves on unchanged and is discharged in a normal convulsion called laughter.

Since much of our childhood experience is processed symbolically in the primary modality it is crucial that the weight of such thinking not be too heavy or too ponderous. T'is a

CONSUMMATION DEVOUTLY TO BE WISHED SINCE MANY CHILDREN HAVE NO CHOICE BUT TO MANAGE THEIR EARLY EXPERIENCE IN HEAVILY WEIGHTED PRIMARY PROCESS. CHILDREN DO HAVE SOME EXITS AVAILABLE, SUCH AS THE DISCHARGE OPPORTUNITIES OF IMAGINATIVE PLAY, GAMES, LAUGHTER, TEARS, AND LEGITIMATE RECOGNITION OF FEELINGS. THUS THE HEAVY, PONDEROUS MOMENTUM OF PRIMARY PROCESS AND THE LIGHT, FLEXIBLE SECONDARY PROCESS PROCEED LOCKED TOGETHER DOWN THE TRACK. THE MAGIC WHICH BOTH PSYCHOANALYSIS AND EDUCATION HAVE BEEN LOOKING FOR IS HOW TO HELP SECONDARY PROCESS GAIN ACCESS TO PRIMARY PROCESS TO REDUCE OR REDIRECT THE LOAD.

2. PATHWAYS (SLIDE 2)

IT IS CHARACTERISTIC OF PEOPLE TO THINK OF THINKING AS AN ORDERLY PROCESSION OF SYMBOLS AS IN A WELL CONSTRUCTED SENTENCE. PRIMARY PROCESS IS NOT THIS AT ALL. HERE WE HAVE A CIRCULAR, SWOOPING, UP, DOWN AND AROUND PROCESS MOVING LIKE PAPER IN A WHIRLWIND OR, AS A COLLEAGUE SUGGESTED, A MESS OF SPAGHETTI FLYING INTO SPACE. EMOTIONAL THOUGHT AS UNDERSTOOD BY SECONDARY PROCESS (WHICH ALL OF THIS IS) LIKES TO BE VAGUE, INDETERMINATE, AND NEVER GET TO THE POINT. SECONDARY PROCESS STRIVES TO BE CLEAR, STRAIGHT, CONNECTED, RELATED AND UNDERSTOOD. IT HAS AN ACCEPTED, CONSENSUALLY VALIDATED STRUCTURE KNOWN AS LANGUAGE AND A MORE CONCISE, INNER VALIDATED STRUCTURE KNOWN AS MATHEMATICS. ALL PRIMARY PROCESS HAS AS MODEL ARE SCHIZOPHRENIC THINKING, NORMAL DREAMS, THE EFFECTS OF GOOD POETRY AND MUSIC.

NOT ALL MEANINGFUL COMMUNICATION IS STRAIGHT AND CONNECTED; CHILDREN AND YOUTH SEEK THE SWOOPING, SWERVING, SQUALLING SOUNDS OF TONES, HARMONICS AND RHYTHMS AND SEEMINGLY FEEL BETTER FOR IT. IT IS POSSIBLE THAT HUMAN ORAL COMMUNICATION ORIGINATED AS CHANTS OR SING-SONG RHYTHMS AS EVIDENT IN MANY PRESENT-DAY LANGUAGES. MUSIC IS PERHAPS THE INNER EAR OF PRIMARY PROCESSES, AS LANGUAGE IS THE OUTER EAR OF SECONDARY PROCESS. IT IS EVIDENT FROM THE BEHAVIOR OF CHILDREN AND ADOLESCENTS THAT PERIODIC DOSES OF TONES, RHYTHMS, AND HARMONIES ARE NECESSARY INGREDIENTS FOR PRIMARY PROCESS THINKING.

3. TIME AND SPACE

PRIMARY PROCESS HAS LITTLE REGARD FOR THE PHYSICAL LAWS OF NATURE. DREAMS ARE REPLETE WITH EXAMPLES OF THE REPEAL OF SUCH LAWS. SPACE AND TIME AS WE KNOW THEM IN OUR WAKING STATE DO NOT APPLY TO OUR DREAM WORLD.

THE INDIVIDUAL WHOSE BEHAVIOR IS BEING GUIDED BY PRIMARY PROCESS WITHOUT SIGNIFICANT ATTACHMENT TO SECONDARY PROCESS MAY INJURE HIMSELF OR OTHERS BY CONFUSING INNER AND OUTER SPACE-TIME. THE YOUNG MAN WHO STEPPED OFF A FOURTEEN-STORY BUILDING AND EXPECTED TO FLOAT OR FLY TO EARTH WAS IN FOR A ROUGH LETDOWN. THE ADMONITION -- "HE SHOULD HAVE STOOD IN BED" -- WAS EXACTLY RIGHT.

NATURE HAS CONTRIVED A SOMEWHAT HELPFUL RUSE BY ENCOURAGING A SIGNIFICANT PORTION OF PRIMARY PROCESS ACTIVITIES TO TAKE PLACE IN BED AND IN DEEP SLEEP. THE PERIOD OF SLEEP CHARACTERIZED BY DREAM ACTIVITY (OFTEN CALLED REM SLEEP) PRODUCES INCREASED ACTIVITY IN MOST METABOLIC ACTIVITIES SUCH AS

BREATHING, HEART BEAT, ENDOCRINE FLOW, AND INNER EYE PERCEPTION. BUT WHAT DOES NOT SEEM TO CHANGE IS MUSCLE TONE. AT THE ONSET OF DREAMS HEAD AND NECK MUSCLES ESPECIALLY SHOW A MARKED DECREASE IN TONUS. THIS PHENOMENON IS SO MUCH RELATED TO THE ONSET OF DREAMING THAT MONITORING THE TONE OF THE MUSCLE UNDER THE CHIN HAS BEEN USED AS A REM ALARM CLOCK. (6, 8)

MAN'S ABILITY TO CONCEPTUALIZE TIME-SPACE WITH SYMBOLS GAVE HER/HIM THE WHEREWITHAL TO TEST OUT AND JUDGE BEHAVIOR WITHOUT BEHAVING. THIS IS A KIND OF REGULATORY MAGIC WHICH SECONDARY PROCESS PERMITS US IN OUR USE OF SYMBOLS AND WHICH PRIMARY PROCESS ABHORS. THAT IS, AS DEWEY POINTED OUT, "WE PERFORM EXPERIMENTS BY MEANS OF SYMBOLS WHICH HAVE RESULTS WHICH ARE THEMSELVES SYMBOLIZED AND WHICH DO NOT THEREFORE COMMIT US TO ACTUAL OR EXISTENTIAL CONSEQUENCES. IF A MAN STARTS A FIRE OR INSULTS A RIVAL, EFFECTS FOLLOW. . . . BUT IF HE REHEARSES THE ACT IN SYMBOLS IN PRIVACY, HE CAN ANTICIPATE AND APPRECIATE ITS RESULT." (3)

YET THERE ARE TIMES WHEN WE WISH TO SHUCK THE BURDEN OF CHECKING CONSEQUENCES AND BE RELATIVELY FREE TO DREAM AND FANTASIZE IN THE WAKING STATE. WHEN THE CHILD IS ABLE TO DIFFERENTIATE HIMSELF AND THE CONCEPT OF "AS IF", PLAY BECOMES AN ARENA OF ACTION IN WHICH BEHAVIOR AND CONSEQUENCES CAN BE TESTED OUT SAFELY IN PRIMARY PROCESS TERMS. THE CHILD PLAYS WITH THE SERIOUSNESS OF A WORKING SURGEON ONLY BECAUSE HE HAS

SUFFICIENT EGO DEVELOPMENT TO SEPARATE HIMSELF AND HIS ACTIONS FROM THE REAL WORLD. TO BE CONTINUALLY WEDDED TO BEHAVIOR AND ITS CONSEQUENCES WHETHER IN THOUGHT AND/OR ACTION IS TO TIE ONE TO A PHYSICAL WORLD WITH CHAINS AND ARMOR. SO THE WRITER, MUSICIAN, ARTIST OR ATHLETE WHO HAS SUCCEEDED IN SAFEGUARDING THE FREEDOM OF HIS PRIMARY PROCESS CAN ALLOW IT TO PURSUE THE PLAYFUL PLEASURES OF THE UNREAL AND IMAGINARY. AS ADMINISTRATOR, THE EGO MUST MAINTAIN A HEALTHY BALANCE BETWEEN THE REAL AND THE IMAGINED. UNRELIEVED REALITY WOULD LAY THE ONUS OF DAY-TO-DAY LIVING TOO HEAVILY ON THE INDIVIDUAL. CONVERSELY, IMAGINATIVE PLAY AND FANTASY WITHOUT END WOULD REQUIRE LIVING PERPETUALLY IN AN "AS IF" WORLD.

4. OPERATIONAL DIALECTIC

WHAT PRIMARY PROCESS CONSIDERS RELATED ARE OBJECTS, EVENTS OR FEELINGS WHICH MAY OCCUR TOGETHER (AS IN TIME OR SPACE) BUT WHICH MAY NOT NECESSARILY BE MEANINGFUL OR SIGNIFICANT TO SECONDARY PROCESS. SECONDARY PROCESS STRIVES MIGHTILY TO SEPARATE, DISTINGUISH AND BE CLEAR ABOUT MEANING THROUGH LANGUAGE, MATHEMATICS AND IMAGES. YET WHEN ONE "KILLS ONE WITH KINDNESS" SECONDARY PROCESS CAN ONLY UNDERSTAND IT AS IMPOSSIBLE. YET THE DIALECTICS OF SUCH THINKING MUST BE MADE LEGITIMATE TO SECONDARY PROCESS SINCE HUMAN RELATIONSHIPS ARE RARELY GUIDED BY CLEAR AND SEPARABLE MEANING. CERTAINLY ONE CAN HATE WITH LITTLE LOVE AND LOVE WITHOUT HATE BUT WE CAN ALSO DO BOTH AT THE SAME TIME. REVERSING THE PERCEPTION WE NOTE THAT PRIMARY PROCESS CAN REPRESENT OPPOSITE MEANING BY THE SAME SYMBOL. PRIMARY PROCESS CAN ALSO AFFIX THE SAME MEANING TO TWO OPPOSITE SYMBOLS. ONE CAN JUMP INTO A LAKE AND BE BURNED ALIVE. OR

ONE CAN JUMP UP AND FALL DOWN AT THE SAME TIME.

5. SOURCES OF ENERGY

PRIMARY PROCESS SEEKS A BALANCE BETWEEN INPUTS AND DISCHARGES OF ENERGY. THE ADMINISTRATOR EGO SEEKS EFFECTIVE REGULATORY MECHANISMS BY WHICH FEELINGS CAN BE RELEASED AT THE FLOOD AND BE SUPPLIED EXCITING INPUTS AT THE EBB. PRIMARY PROCESS IS JUST AS UNCOMFORTABLE WITH BOREDOM AND SIGNIFICANT REDUCTIONS IN SENSORY STIMULATION AS IT IS WITH TRAUMA AND EMOTIONAL OVERLOADS. CHILDREN NEED THE ROLLER COASTER AND THE WILD RIDES AS WELL AS THE SOCIALLY LEARNED OUTLETS OF TEARS, LAUGHTER, PLAY, WORK, MUSIC, HIKING, AND INTERPERSONAL RELATIONSHIPS.

WORK, PLAY, LOVE, LAUGHTER AND TEARS ARE THE MAJOR HEALTHY OUTLETS FOR EMOTIONAL ENERGIES. YET THE QUALITY OF LAUGHTER CAN RANGE FROM THE BLAND, INNER GIGGLE OF THE PSYCHOTIC TO THE HYSTERICAL LAUGHTER OF THE TICKLED. SEXUAL ENCOUNTERS CAN BE MOMENTARY ESCAPADES OR PART OF A CARING, FULLY FUNCTIONING INTERPERSONAL RELATIONSHIP. WORK CAN BE LIBERATING AND CREATIVE AS WELL AS DEADLY DULL.

WHEREAS PRIMARY PROCESS REQUIRES INPUTS AND OUTLETS TO KEEP INNER TENSIONS IN BALANCE, SECONDARY PROCESS SEEKS LINKAGES OR CONNECTIONS IN LOGIC, LANGUAGE AND REALITY. THE ENERGY OF SECONDARY PROCESS IS DIRECTED TOWARD CONCEPTS OF INDUCTION AND DEDUCTION ON THE BASIS OF CLEARLY ENUNCIATED AND SPECIFIED SCIENTIFIC PRINCIPLES. SUCH ACTIVITY ON THE PART OF SECONDARY PROCESS IS IN THE SERVICE OF REALITY TESTING EXPRESSED BY G. B. SHAW AS "BEING ABLE TO CHOOSE THE LINE OF GREATEST ADVANTAGE INSTEAD OF YIELDING IN THE DIRECTION OF LEAST RESISTANCE."

6. Morality

The "rightness" of emotional thinking is guided by the pleasure-pain principle as contrasted to the reality-principle in intellectual thinking. Undoubtedly both principles operate to preserve and enhance the individual in his adaptive development. And as Freud points out the development of the reality principle may be considered an adaptive process by the pleasure principle to preserve and enhance its own processes.

The pleasure-pain principle acts as it is named -- seeking pleasure and avoiding pain. It knows of no No's, no right or wrong, no good or bad. It is characteristically childish in wanting objects and relationships which serve its pleasures. As the organism grows the pleasure principle serves less and less ably as a guide to self-preservation. One must learn to survive in the real world. To do this, clear and valid object relations must be developed, sensory-motor skills integrated as well as the internalization of principles of conduct as mediated by parental figures. When these skills have been acquired, the linkages of the pleasure and reality principles are strengthened so that it is now possible for a child to feel good about doing good. This applies to pride in accomplishment as well as satisfaction in developmental tasks.

The successful protection and integration of the pleasure principle into the reality principle is a function of the child's experience with human objects. In the family and in play the child seeks clear boundaries between fantasy and reality. To the extent to which all our realities are somewhat distorted and all our fantasies are reality-based, this is difficult to

ACHIEVE. HOWEVER, WHEN THESE DIFFERENTIATIONS NEVER CLEARLY EMERGE FOR THE GROWING CHILD, HIS MORALITY MAY CONTINUE TO BE LARGE GULPS OF PRIMARY PROCESS PLEASURE. A CHILD MAY FIND GREAT FUN IN SOLITARY OR SIDE BY SIDE PLAY WITH OTHER CHILDREN. BUT WITH THE ADVENT OF THE FIRST RELATIONSHIP AS IN TAKING TURNS OR LATER WHEN PLAY IS INCORPORATED INTO GAMES, PASSION MUST BEGIN TO ACCEPT RULES. GAMES IMPOSE INITIAL TESTING CONCEPTS OF MORALITY BY PROVIDING OPPORTUNITIES TO CONTROL AND CHANNEL IMPULSES AND TO DO SO IN ACCORDANCE WITH THE HIGHEST PRINCIPLE OF BEHAVIOR -- FAIR PLAY.

7. HISTORICAL ANTECEDENTS

PRIMARY PROCESSES ARE PHYLOGENETICALLY ANCIENT AND EMBEDDED IN OUR OLDEST BRAIN AND NEUROLOGICAL STRUCTURES. THEY ARE THE STUFF OF WHICH DREAMS ARE MADE BY WITHIN-PERSON HISTORICAL GUIDELINES. SECONDARY PROCESS IS A RELATIVELY LATECOMER TO THE PHYLOGENETIC SCENE. IT OBTAINS ITS DATA THROUGH SENSE ORGANS WHICH HELP THE ORGANISM TO KNOW THE EXTERNAL WORLD AND BE MORE ADAPTIVE TO IT. INFORMATION PROCESSED BY SECONDARY PROCESS IS UTILIZED BY PRIMARY PROCESS IN CREATING DREAMS. WHILE THESE TWO PROCESSES MAY HAVE DEVELOPED AT DIFFERENT TIMES FOR DIFFERENT PURPOSES, THEY APPARENTLY STRIVE TO CONNECT THE INNER AND OUTER WORLDS TO PRODUCE ADAPTIVE AND HEALTHY BEHAVIOR.

IMPLICATIONS FOR EDUCATION

I HAVE FOUND THESE METAPHORS FOR PRIMARY AND SECONDARY PROCESSES USEFUL IN ASSISTING TEACHERS AND PARENTS TO UNDERSTAND BEHAVIORS WHICH EXCEED RATIONAL UNDERSTANDING. THE HEAVY-NIMBLE COMPARISON IN THE WEIGHT DIMENSION HAS BEEN HELPFUL IN PERSUADING

TEACHERS THAT LAUGHTER IS A WORTHWHILE GOAL FOR SOME STUDENTS AND THAT PUNNING, ALONG WITH EVOKING SOME TERRIBLE GROANS, CAN LIGHTEN THE LOAD ON SYMBOLS BY DEMONSTRATING THAT WORDS CAN BE PLAYED WITH. THE FACT THAT EMOTIONAL THINKING CIRCLES AND SWOOPS, LIKE STRANDS IN A FLYING GLOB OF SPAGHETTI HELPS PARENTS UNDERSTAND THAT THE RESOLUTION OF EMOTIONAL CONFLICTS IS NOT AN ACT OF SCIENTIFIC LOGIC. BUT MORE THAN MODELS FOR UNDERSTANDING, THE SCHEMA REPRESENTED IN THESE COMPARISONS IS INTENDED TO MAKE CLEAR WHAT FREUD AND DEWEY STATED EARLIER -- THAT IN EDUCATION WE ARE ATTEMPTING TO ENHANCE TWO DIFFERENT THOUGHT PROCESSES SO THAT EACH IS SAFEGUARDED IN ITS OWN DOMAIN AND CAN PROVIDE FREER AND MORE OPEN ACCESS ROADS TO THE OTHER.

MANY YEARS AGO RUTH BENEDICT DESCRIBED CONTINUITIES AND DISCONTINUITIES IN OUR CULTURE CITING FOR EXAMPLE RAPID SHIFTS FROM NON-RESPONSIBLE TO RESPONSIBLE STATUS ROLES, SHIFTS FROM SUBMISSIVE TO DOMINANT RELATIONSHIPS AND FROM NON-SEXUAL TO SEXUAL ROLES. HER POINT WAS THAT MOST CULTURES FURNISH SUPPORTS TO CHILDREN AND ADOLESCENTS AS THEY ATTEMPT TO MEDIATE THESE CHANGES.(1) OUR CULTURE DOES LITTLE IN THIS REGARD. A CHILD PROCEEDS SOMEWHAT MECHANICALLY FROM A FAMILY SETTING TO A PEER PLAY SETTING TO A SCHOOL SETTING WITH THE ASSUMPTION THAT THE SKILLS AND COMPETENCES MEDIATED BY EACH OF THESE INSTITUTIONAL ARRANGEMENTS HAVE BEEN ACQUIRED. FOR MANY CHILDREN WHO ARRIVE AT THE DOORS OF THE SCHOOL THE CONTROL AND INTEGRATION OF IMPULSIVE THINKING WITH REALITY-BASED THINKING IS STILL A PROBLEM. THEY ENTER SCHOOL STILL SEEKING THE PREREQUISITE SKILLS FOR LEARNING -- SUPPORTIVE ADULTS, COMFORT AND ENJOYMENT IN PLAY AND IMAGINATION AND A PLEASURE PRINCIPLE WHICH IS REWARDED BY

MEETING DEVELOPMENTAL TASKS.

IT IS POSSIBLE THAT GREATER STRIDES CAN BE MADE IN REALIZING THE COGNITIVE-AFFECTIVE GROWTH OF CHILDREN BY ELIMINATING THE DISCONTINUITIES IN CHILDREN'S INSTITUTIONS AND ALLOWING THEM TO MOVE AHEAD AND BACKWARDS BY COMBINING FAMILY, PLAY, AND COGNITIVE FUNCTIONS IN INSTITUTIONS WHICH ARE FLEXIBLE AND INTEGRATIVE IN THESE FUNCTIONS. SUCH PARENT-CHILD LEARNING CENTERS WOULD PROVIDE OPPORTUNITIES FOR CHILDREN TO RELATE TO MEDIATIVE ADULTS, TO PLAY AND TO PLAY GAMES, AND TO ATTEMPT ACADEMIC TASKS WHEN MOTIVATED AND READY. MOREOVER, IT WOULD PERMIT CHILDREN TO SLIP BACK AT ANY POINT IN THEIR DEVELOPMENT AND NOT FAIL IN THEIR JOURNEY.

MANY CHILDREN AND ADOLESCENTS WHO HAVE COME THROUGH OUR INSTITUTIONS ARE AWARE OF THEIR EDUCATIONAL DEFICIENCIES. MANY FEEL SHORT-CHANGED IN THEIR EMOTIONAL LEARNINGS. INDEED, MANY OBSERVERS AGREE WITH HEATH THAT WHAT WE ARE WITNESSING IN THE MULTITUDE OF AFFECTIVE EDUCATION PROGRAMS IS A DIFFUSE, GUTSY REACTION TO EXCESSIVE ACADEMICISM, THE IRRATIONALITY OF THE VIET NAM WAR, THE DRIVE FOR RACIAL INJUSTICE, EVIDENCES OF INSTITUTIONAL CORRUPTION, AND CONSCIOUSNESS RAISING VIA MAHARISHI, MANTRA OR MARIHUANA. PERHAPS IN RESPONSE TO THOSE WHO SEE LITTLE HUMANISM AND RATIONALITY IN THOSE WHO ESPOUSE SECONDARY PROCESSES, WE HAVE TILTED PRECARIOUSLY TOWARD AFFECTIVE ENDEAVORS SUCH AS HUMANISTIC EDUCATION, CONFLUENT EDUCATION, ENCOUNTER GROUPS, PERSONAL GROWTH GROUPS, INTERPERSONAL SKILLS WORKSHOPS, EXISTENTIAL MEDITATION, YOGA, AND ZEN BUDDHISM. SOME OF THESE PROGRAMS AND PROCESSES ARE WELL CONCEIVED AND DEVELOPED TO MOVE PRIMARY AND SECONDARY PROCESSES TOGETHER. SOME LACK CLEAR

SECONDARY PROCESS GOALS WHILE OTHERS SUGGEST SUCH LACKS ARE ONLY IN THE MIND OF SECONDARY PROCESS PEOPLE. OTHERS SUGGEST IT IS SUFFICIENT FOR STUDENTS TO BE INVOLVED, TO COMMUNICATE, TO EXPRESS FEELINGS AND BE WITH IT. THE NASTY PUT-DOWN IN AN ENCOUNTER GROUP IS TO BE TOLD THAT YOU ARE INTELLECTUALIZING, NOT EXPRESSING FEELING. CONVERSELY, THE NASTY PUT-DOWN IN THE GROVES OF ACADEME IS TO BE TOLD "THAT'S HOW YOU FEEL; NOW GIVE US THE FACTS."

TEACHERS AND MOST PROFESSIONALS ARE ILL PREPARED TO "EDUCATE" PRIMARY PROCESSES. IT IS USUALLY NOT AVAILABLE TO THEM CONCEPTUALLY NOR IS SEEN BY MOST AS CLEARLY RELEVANT TO EDUCATIONAL PROCESSES. I RECALL A SEMINAR ON EMOTIONAL PROCESSES IN LEARNING WHICH CONTAINED A DOZEN TEACHERS MOST IN THEIR TWENTIES AND THIRTIES, TWO ELDERLY PARTICIPANTS, MYSELF, AND A JUNIOR LEAGUISH MATRON. THE YOUNGER MEMBERS OF THE SEMINAR RESPONDED SOMEWHAT NEGATIVELY TO HER CONTRIBUTIONS SO MUCH SO THAT WHEN MY MATRON PRESENTED A RESEARCH PAPER, IT WAS PROMPTLY AND PASSIONATELY PICKED TO PIECES. THE STUNNED LADY RESPONDED WITH TEARING EYES AT WHICH POINT I STOPPED THE PROCEEDINGS TO ASK IF ANYONE COULD HELP ME UNDERSTAND WHAT WAS GOING ON. WHAT DID I MEAN? THEY ASKED. I SUGGESTED THAT WHAT I WAS HEARING WAS MORE THAN PROFESSIONAL CRITICISM. WHAT I WAS HEARING WAS MORE LIKE PERSONAL HOSTILITY AND VINDICTIVENESS. WHAT ABOUT IT? THEY ASKED. WAS I HEARING CORRECTLY? CORRECT NOR NOT, THEY WENT ON TO TELL ME, SUCH ITEMS WERE NOT LEGITIMATE TERRITORY FOR THIS CLASS. ON THE OTHER HAND, I FELT WE COULD ALL LEARN SOMETHING IF WE COULD UNDERSTAND THE EMOTIONAL DATA WE HAD GENERATED. THE GROUP DECIDED IT WAS NOT A FITTEN SUBJECT FOR A GRADUATE SEMINAR AND THE MATTER WAS "DROPPED"?

HERE CLEARLY IS THE NUB OF THE PROBLEM AND THE REASON FOR ATTEMPTING TO COMPARE AND INTEGRATE THE STRUCTURE OF EACH OF THE THINKING PROCESSES. WE HAVE GIVEN TO EACH AN EXCLUSIVENESS AND LEGITIMACY WHICH PROHIBITS AND BLOCKS ENHANCING RELATIONSHIPS BETWEEN THEM. MAN WILL REMAIN THE UNFINISHED FRAGMENTED BEAST UNLESS HE CAN PLAN AND DEVELOP INSTITUTIONS THAT CREATE BRIDGES BETWEEN PRIMARY AND SECONDARY PROCESSES.

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References

1. Benedict, R. "Continuities and Discontinuities in Cultural Conditioning". Psychiatry, Vol. 1, 1938, pp. 161-7.

2. Dewey, J. Experience and Education. New York: Macmillan, 1963.

3. Dewey, J. The Quest for Certainty. New York: Minton, Balch, 1929.

4. Freud, S. "Formulations on Two Principles of Mental Functioning", in Collected Papers, Vol. 4. New York: Basic Books, 1959.

5. Guilford, J. P. The Nature of Human Intelligence. McGraw-Hill, 1967.

6. Jacobson, A., Kales, A., Lehmann, D. and Hoedekmaker, F. "Muscle Tonus in Human Subjects during Sleep and Dreaming". Exp. Neurology, 10, 1964, pp. 418-424.

7. Koestler, A. The Act of Creation. New York: Macmillan, 1964.

8. Public Health Service. "Current Research on Sleep and Dreams". Publication No. 1389, 1966.